

Suggestions for small systems serving less than 3,300 people

Notifying the public of a boil water advisory

It is the responsibility of a public water system to protect public health by providing safe drinking water. In the event that contamination is detected in drinking water, the system must notify customers quickly to protect them and to comply with the requirements of the Public Notification Rule.



Boil vigorously for 1 minute.

Once a potential health hazard is discovered in a water supply, system owners and operators are required to notify their customers using a public notice. Public notifications are classified as Tier 1, Tier 2, and Tier 3 with Tier 1 being the most serious.

Public notifications can cover a range of violations including hazardous or toxic chemical contamination, turbidity violations or exceedances, and microbiological contamination. In practice, however, the majority of public notices are boil water advisories (BWAs), which are microbiological in nature - the result of coliform bacteria.

When the fecal coliform or *E. coli* maximum contaminant level (MCL) is exceeded, a Tier 1 violation is triggered. Consequently, a system is required to notify the public as soon as possible, but not later than 24 hours of the occurrence. And because coliform is present, the system must inform its customers to boil their drinking water until further notice.

Be prepared - develop a Boil Water Advisory Plan of Action

So, in the event of a boil water advisory situation, how do you get the word out to customers immediately? The first step is to develop a set of procedures - a plan of action. Here are some general suggestions for preparing such a plan ahead of time:

1. **Decide who is in charge.** Designate a first and second person in charge in case one or the other is out of town or unable to handle the emergency.

2. **Make a list of reasons requiring a boil water advisory.**

For your list, here are the major reasons for issuing a BWA: zero or negative pressure; a sudden drop in pressure to below 20 pounds per square inch (psi)*; a lab confirms presence of *E. coli*; a break in a distribution line; a malfunction of the treatment system; a cross-connection to a contaminated water supply; or the flooding of a supply well.

(Water pressure falling below 20 psi does not necessarily constitute an immediate health hazard. It does signify the existence of conditions that could allow contamination to enter the water system through backflow by back-pressure or back-siphonage. Drops in pressure below 20 psi should be considered on a case-by-case basis, and in conjunction with your regional DEQ office.)*

SETTING UP A PHONE TREE - SOME SUGGESTIONS -

Phone trees ("telephone trees") are easy to set up, but a few suggestions may be in order:

- Select a lead person/coordinator and a set of volunteers.
- Make a list with current telephone numbers (and/or e-mail addresses) of all the people you want to reach.
- Write a brief script of what you want to say (this will vary for each particular situation, of course).
- Have each volunteer phone one other person, or perhaps four or five others.
- Each caller should keep trying to reach each person on their list until they make contact.
- If you cannot reach a person on the list, notify the coordinator.
- Finally, test the tree once before you need it.

3. **Develop a clear set of procedures.** Decide which actions to take in an emergency situation, such as a coliform MCL exceedance, and then write down the procedures and use these as your guidelines. Without a plan of action, conflicting directives and public notices can lead to confusion and frustration on the part of your customers, and endanger their health. (*A suggested list of basic emergency procedures is given below.*)

4. **Determine temporary alternate water sources.**

Decide ahead of time how you will provide alternative safe drinking water in an emergency if the situation warrants it. Your choices may be to use bottled water or bulk water provided by certified water haulers. (For a list of certified water haulers in your county, see DEQ's http://www.deq.state.id.us/water/assist_business/pws/haulers_certified.xls or request a copy from DEQ or the local health district.)

■ **IT IS EXTREMELY IMPORTANT . . .**

to remember to contact the operators of all public facilities (schools, daycares, hospitals, nursing homes, etc.) to notify them of the Boil Water Advisory.

If direct contact with the operator is not possible, ask to speak to a member of the facility's management staff. Valuable time can be lost if your message is routed incorrectly.

■ **Deliver fliers door-to-door.** Type out notices or fliers. You could use hand-written notes, but customers may take this approach as a prank. Fliers can be taped to a door or placed where the message is easily noticed.

If you use the flier method, never place the notice or advisory in a mail box because residents may have already checked their mail and may not find out until the following day.

■ **Door hangers.** Closely aligned to fliers are door hangers, which can be an effective way to notify citizens of a boil water advisory.

If the door hanger is not made with an opening to put over the door knob, knot a rubber band through a hole punched in the notice and

put the rubber band around the door knob. You can also tape the hanger to the door knob.

You can use the door hanger examples (*shown on page 4 in the newsletter insert*) as a guide to make your own copy or copy these notices **ahead of time** to have on hand, in case you ever have to use them.

When there is an emergency, follow the steps listed below:

❑ **Contact your local DEQ regional office or health department.** As soon as you discover the problem, contact your local DEQ regional office or health department to discuss the situation and to determine what your next step might be. If the decision is to notify the public, the notification method and urgency will depend on the severity of the public health threat. If the circumstances call for a boil water advisory, you must notify the public immediately (no later than 24 hours after lab notification).

Depending on the actual contamination event, it may not be necessary to issue an advisory to all system users. You should only contact those customers affected by the threat. For example, there may be only a few households on one street whose drinking water was affected by a break in a spur main.

❑ **Next, get the word out to your customers.** Once you decide to issue a BWA, here are some possible options for notifying the public for consideration by small water systems:

■ **Door-to-door personal notification.** This one-on-one contact may be a feasible option in smaller communities. Of course, early evening is generally the best time to find someone at home.

■ **Post notices/fliers in public places.** Post notices in public places normally frequented by residents, such as post offices, convenience stores, gas stations, etc.

■ **Phone trees.** Enlist volunteers to telephone customers (*see "Setting Up a Phone Tree" sidebar on page 1*).

■ **Notify institutions serving groups of people.** The public water system must notify hospitals, nursing homes, day care centers, schools, and other sensitive populations about the BWA. In addition to leaving fliers or door hangers, making personal calls or contacts to these institutions are recommended.

■ **Hold a community meeting.** This would depend, of course, on the circumstances of the contamination, and the size of the community.

■ **TV, radio, and newspapers.** It is extremely important to contact the media with a prepared news release, to notify the public.

In a small community, however, TV and radio may not always be the fastest way to spread the word, depending on the time of day, the location of the stations and the water system, etc. Obviously in small communities with perhaps only a weekly newspaper, or a non-local newspaper, notices may not be practical.

- **Additional suggestions.** Contact the municipal police department; include the public notice information on the greeting of your answering machine or voicemail; use sound trucks as a supplement to hand delivery; and make use of internet e-mail and home pages if available.
- **Finally, as a note, notices should match the consumer.** Notices for non-community systems should be appropriate to the consumers' situation. Visitors at a rest stop, for example, just need to be aware that they should not drink the water, rather than be told to boil it.

For systems (such as schools, day care centers, businesses) with fecal coliform or *E. coli* violations, if the water is generally used for drinking only, simply tell consumers not to drink the water rather than to boil the water.

- ❑ **Send copies of notices to DEQ.** Remember to send a copy of each type of notice and a certification statement to your regional DEQ office within ten days after issuing a notice.
- ❑ **When the danger is past, notify the public by lifting the BWA.** The public water system rescinds or lifts the boil water advisory when test results show that the problem is resolved.

The same methods used to notify the customers of the boil water advisory are used to notify the customer that the notice has ended (*see door hanger inserts on page 5 for "BWA Advisory Lifted"*).

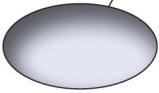
Remember, when the health of the public is threatened, failure to notify the public can result in an enforcement action with monetary penalties. BWAs must always be issued with care.

Issuing a boil water advisory when there is not sufficient reason will only lose the confidence of your customers. This may lead to customers ignoring a call to boil their drinking water at another time when the situation is critical.

Posted notices must remain posted for as long as the violation or situation persists. Postings about resolved violations must remain in place for at least seven days.

If time allows, always contact the local DEQ office for advice and assistance before issuing a boil water advisory. Remember, be prepared with an emergency plan, which perhaps you will never have to use. ■

Boil Water Public Notification Door Hangers



Warning:
Boil all drinking water!
¡Hiervan el agua antes de usarla!

☐ Fecal coliform
☐ E. coli bacteria
☐ Other: _____

were detected in the water supply on:
 (date) _____

Boiling kills bacteria and other organisms in the water:

☐ Bring water to a boil
☐ Boil vigorously for 1 minute
☐ Let water cool before using

To avoid possible illness: Use only boiled water for drinking, brushing teeth, diluting fruit juices, and all other food preparations or consumption. Do not use ice from a household automatic icemaker or use any ice made from unboiled water.

What is being done to correct problem?

Water System: _____
 PWS I.D.: _____
 Contact: _____
 Telephone: _____
 Date notice distributed: _____

WARNING WARNING

When a public water system detects fecal coliform or *E. coli* in routine and repeat water samples collected from the distribution system, a Tier 1 violation is triggered and the system must be disinfected. As soon as the system is notified by the laboratory of the presence of fecal coliform or *E. coli*, a public water system must notify its customers of the Tier 1 violation within 24 hours.

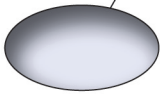
Door hangers are one method of getting the word out quickly.

The sample door hanger (with front and back – see insert, page 4) can be photocopied and used in an emergency.

Once the drinking water problem is corrected, the public water system can lift (or rescind) the boil water advisory. Do not, however, lift the boil water advisory notice until bacteriological analyses conducted in accord with EPA requirements confirm that the water is safe to drink.

If you have any doubts or concerns about lifting the advisory, contact your local DEQ regional office or district health department.

The sample door hangers (in Spanish and English – see insert, page 5) can be photocopied and used once the BWA ends.



Attention:
Boil Water
Advisory Lifted

The _____
 Water System is advising its customers that it is no longer necessary to boil their drinking water.

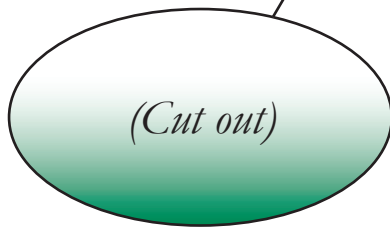
Recent test show the absence of
☐ Fecal coliform
☐ E. coli bacteria
☐ Other: _____

We have completed inspections, water quality sampling, disinfection, and flushing to resolve the contamination problem.

The inspection of the water system indicated (give description of the source of contamination, if known, and what will be done to maintain good water quality.) _____

If you have shut off or not used fixtures, water fountains, ice machines, soda machines, and/or other equipment over the past several days, flush the fixture or equipment until there is a change in water temperature before putting it back into service.

Water System: _____
 PWS I.D.: _____
 Contact: _____
 Telephone: _____
 Date notice distributed: _____



Warning:

Boil all drinking water!

¡Hiervan el agua antes de usarle!

- ☐ Fecal coliform
- ☐ E. coli bacteria
- ☐ Other: _____

were detected in the water supply on:
(date) _____

Boiling kills bacteria and other organisms in the water:

- ☒ Bring water to a boil
- ☒ Boil vigorously for 1 minute
- ☒ Let water cool before using

To avoid possible illness: Use only boiled water for drinking, brushing teeth, diluting fruit juices, and all other food preparations or consumption. Do not use ice from a household automatic icemaker or use any ice made from unboiled water.

What is being done to correct problem?

Water System: _____

PWS I.D.: _____

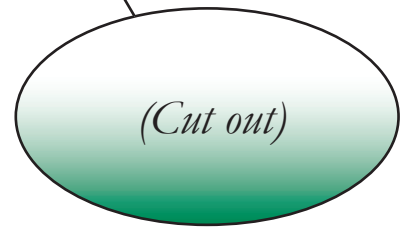
Contact: _____

Telephone: _____

Date notice distributed: _____

WARNING WARNING

(Front)



Additional Information

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

What are fecal coliform and E. coli?

Fecal coliform and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes.

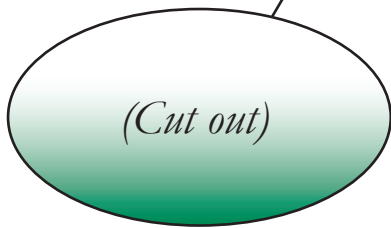
Microbes in these waters can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms.

These microbes may pose a special health risk for infants, young children, some of the elderly, and people with severely comprised immune systems.

How long will the boil water advisory remain in effect?

This advisory will remain in effect until additional samples no longer show the presence of the bacteria. We will notify you when that happens.

(Back)



Attention: Boil Water Advisory Lifted

The _____
Water System is advising its customers that
it is no longer necessary to boil their drinking
water.

Recent tests show the absence of

- ☐ Fecal coliform
- ☐ E. coli bacteria
- ☐ Other: _____

We have completed inspections, water quality
sampling, disinfection, and flushing to resolve
the contamination problem.

The inspection of the water system indicated
(give description of the source of contamination,
if known, and what will be done to maintain good
water quality.)

**If you have shut off or not used fixtures, water
fountains, ice machines, soda machines, and/
or other equipment over the past several days,
flush the fixture or equipment until there is a
change in water temperature before putting it
back into service.**

Water System: _____

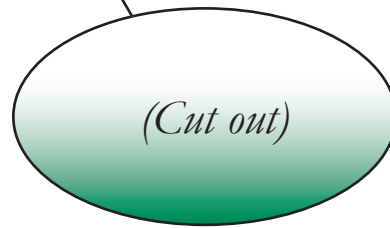
PWS I.D.: _____

Contact: _____

Telephone: _____

Date notice distributed: _____

(Front)



¡Aviso! Se anula el orden de hervir el agua

Las autoridades del sistema de agua, la
_____ le avisan que ya no es necesario hervir el
agua.

Los análisis muestran que de nuevo se puede
utilizar el agua y que se ha eliminado todas
las fuentes de contaminación posibles.

Preguntas sobre éste aviso pueden ser dirigidas a:
Oficial(es) del Sistema de Agua

Número de telefono

(Back)

Training Schedule

Class Sponsor	Location/Date
Arsenic (BE) - Water	Idaho Falls, April 5
Vulnerability Assessment (IRWA)	Preston, April 11
Vulnerability Assessment (IRWA)	Rexburg, April 13
Basic Lab Procedures (IRWA)	Twin Falls, April 18
Water Tank Maintenance (BE) - Water	Bonnors Ferry, April 25
Disinfection of Water & Wastewater (BE) - W/WW	Sandpoint, April 26-27
Cross Connection Identification (BE) - W/WW	Payette, May 3-4
Arsenic (BE) - Water	Kuna, May 9
Water III & IV (BE) - Water	Boise, May 10-11
VSWS Certification Review (BE) - Water	Orofino, May 23
Arsenic (BE) - Water	Lewiston, May 24
WW III & Certification Review (BE) - WW	Nampa, May 31 - June 1
Pumps & Motors (BE) - W/WW	Idaho Falls, June 6-7
Laboratory Certification Review (BE) - W/WW	Post Falls, June 13
Lagoons O&M (BE) - WW	Coeur d'Alene, June 14-15
Water I & II Certification Review (BE) - Water	Boise, June 20 - 21

Sampling Plan Development (BE) - Water	Boise, June 22
Cross Connection Basic (BE) W/WW	Sandpoint, June 27
Land Application Certification Review (BE) - WW	Coeur d'Alene, June 28-29

For further information, contact the following:

(BE) = Brown Environmental, Inc.
1-800-543-4358 or for the Boise area, 1-208-465-5725.
Web site: www.idahooperatortraining.com.

(IWA) = Idaho Rural Water Association,
1-800-962-3257 or 1-208-343-7001.
Fax: 1-208-343-1866. E-mail: irwa@idahoruralwater.com
Web site: www.idahoruralwater.com/index2.htm.

A reminder to all community water systems:

2005 CCRs
are due July 1, 2006
DEQ will make templates available in April.

The template can be downloaded at:

www2.state.id.us/deq/water/dw/ccr.htm